

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for restoring battery data in a portable appliance comprising the steps of:  
receiving reference battery data internally set in a battery and adapted to manage the battery, and storing the received reference battery data as a backup data;  
assessing the battery data periodically measured with the reference battery data set in the battery to determine current battery characteristics;  
comparing battery data periodically measured for the battery with the stored reference battery data to monitor the measured battery data; and  
updating the reference battery data set in the battery by the stored reference battery data when it is determined in accordance with the comparison that the measured battery data is damaged.

2. (Currently Amended) The battery data restoring method according to claim 1, further comprising ~~the step of~~:

after the update of the reference battery data, performing a calibration process for re-setting the battery reference data in accordance with a current capacity of the battery.

3. (Original) The battery data restoring method according to claim 1, wherein the reference battery data comprises temperatures-based reference voltage, current and capacity data of the battery.

4. (Original) The battery data restoring method according to claim 1, wherein the measured battery data comprises at least one of temperature, voltage and current data.

5. (New) The battery data restoring method according to claim 1, wherein the backup data is stored outside a battery module in the portable appliance.

6. (New) The battery data restoring method according to claim 5, wherein the backup data is stored in a host microprocessor of the portable appliance.

7. (New) The battery data restoring method according to claim 2, restoring the reset battery reference data as the backup data.

8. (New) The battery data restoring method according to claim 1, wherein the comparing comprises determining whether the measured data is distorted.

9. (New) A apparatus for restoring battery data in a portable appliance comprising:

means for receiving reference battery data internally set in a battery and adapted to manage the battery, wherein the received reference battery data is stored as a backup data;

means for assessing the battery data periodically measured with the reference battery data set in the battery to determine current battery characteristics;

means for comparing battery data periodically measured for the battery with the stored reference battery data to monitor the measured battery data; and

means for updating the reference battery data set in the battery using the backup data when the comparison determines that the measured battery data is damaged.

10. (New) The apparatus of claim 9, further comprising:  
means for performing a calibration process for re-setting the backup data in  
accordance with a current capacity of the battery after the update of the reference battery  
data.

11. (New) The apparatus of claim 9, wherein the reference battery data  
comprises temperatures-based reference voltage, current and capacity data of the battery,  
and wherein the measured battery data comprises at least one of temperature, voltage and  
current data.

12. (New) A method for restoring battery data in a portable appliance  
comprising:

receiving reference battery data internally set in a battery and adapted to  
manage the battery, and storing the received reference battery data as a backup battery  
data in a host computer;

comparing battery data periodically measured for the battery with the stored  
reference battery data to determine current battery characteristics;

determining in the host computer, based on a comparison with the stored backup data, when the battery data periodically measured is damaged; and

updating the reference battery data set in the battery using the backup battery data when it is determined in accordance with the comparison that the measured battery data is damaged.

13. (New) The battery data restoring method according to claim 12, further comprising:

after the update of the reference battery data, performing a calibration process for re-setting the backup battery data in accordance with a current capacity of the battery.

14. (New) The method according to claim 12, wherein the reference battery data comprises temperatures-based reference voltage, current and capacity data of the battery, and wherein the measured battery data comprises at least one of temperature, voltage and current data.